AMENDMENTS TO THE CLAIMS

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:



1. (Currently Amended) A method of Edge-Node Interleave Sort for Leaching and Envelop (ENISLE), comprising:

mapping a circuit into a V-E plain plane, comprised of sides, to transform a circuit information into said V-E plainplane which contains the information of node and edge information, Wherein wherein said V_indicates nodes that represent components of said circuit and wherein said E indicates edges that represents the nets of said circuits;

determining whether V-E pairs distribution on said V-E plainplane is uniformly or not, if said V-E pairs distribution approaching to non-uniformly distribution is not uniformly distributed, then randomizing said V-E pairs on said V-E plainplane, otherwise performing the following steps for sequentially arranging allocations of the V-E pairs according to the magnitude of each said node or said edge, thereby obtaining min-cut or/and ratio min-cut partitioning;

performing a first sorting step from an edge view based on a first side of said V-E plainplane;

performing a second sorting step from an-a node view based on a second side of said V-E plainplane;

performing a third sorting from said edge view based on a third side of said V-E plainplane; and

performing a fourth sorting step from said node view based on a fourth side of said V-E <u>plainplane</u>.



- 2. (Currently Amended) The method of claim 1, wherein said first side refers to a bottom side of said V-E plainplane.
- 3. (Currently Amended) The method of claim 1, wherein said second side refers to a right side of said V-E plainplane.
- 4. (Currently Amended) The method of claim 1, wherein said first side refers to a top side of said V-E <u>plainplane</u>.
- 5. (Currently Amended) The method of claim 1, wherein said first side refers to a left side of said V-E plainplane.
- 6. (Currently Amended) The method of claim 1, further comprising following steps after performing said fourth sorting:

initializing node set record;

performing a fifth sorting step from said node view based on the second side; performing a sixth sorting step from said edge view based on said first side/third

determining whether said node set is still interchanged or not?—I, if said node set is no longer interchanged, then go back to and perform said fifth sorting step, otherwise, performing a seventh sorting step from said node view based on said fourth side;

determining whether said node set still interchange or not? I, if said node set is still interchanged, then performing said fifth sorting step for achieving an optimal min-cut or ratio min-cut partitioning.

side;

7. (Currently Amended) The method of claim 6, wherein said first side refers to a bottom side of said V-E plainplane.



- 8. (Currently Amended) The method of claim 6, wherein said second side refers to a right side of said V-E plainplane.
- 9. (Currently Amended) The method of claim 6, wherein said first side refers to a top side of said V-E plainplane.
- 10. (Currently Amended) The method of claim 6, wherein said first side refers to a left side of said V-E <u>plainplane</u>.
- 11. (Currently Amended) A method for min-cut and/or ratio min-cut partitioning, comprising:

mapping a circuit into a V-E plainplane, comprised of sides, to transform a circuit information into said V-E plainplane which contains the information of node and edge information, Wherein wherein said V indicates nodes that represent components of said circuit and wherein said E indicates edges that represents the nets of said circuits;

performing following steps for sequentially arranging allocations of the V-E pairs according to the magnitude of each said node or said edge, thereby obtaining min-cut or/and ratio min-cut partitioning;

performing a first sorting step from an edge view based on a first side of said V-E plainplane; performing a second sorting step from an node view based on a second side of said V-E plainplane;

performing a third sorting from said edge view based on a third side of said V-E plainplane; and

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performing a fourth sorting step from said node view based on a fourth side of said V-E plainplane.



- 12. (Currently Amended) The method of claim 11, further comprising determining whether said V-E pairs distribution on said V-E plainplane is uniformly or not, if said V-E pairs distribution approaching to non-uniformly distribution is not uniformly distributed, then randomizing said V-E pairs on said V-E plainplane.
- 13. (Currently Amended) The method of claim 11, wherein said first side refers to a bottom side of said V-E plainplane.
- 14. (Currently Amended) The method of claim 11, wherein said second side refers to a right side of said V-E plainplane.
- 15. (Currently Amended) The method of claim 11, wherein said first side refers to a top side of said V-E plainplane.
- 16. (Currently Amended) The method of claim 11, wherein said first side refers to a left side of said V-E plainplane.
- 17. (Currently Amended) A method for min-cut and/or ratio min-cut partitioning, comprising: mapping a circuit into a V-E plainplane, comprised of sides, to transform a circuit information into said V-E plainplane which contains the information of node and edge information, Wherein-wherein said V_indicates nodes that represent components of said circuit and wherein said E indicates edges that represents the nets of said circuits;

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determining whether V-E pairs distribution on said V-E plainplane is uniformly or not, if said V-E pairs distribution approaching to non-uniformly-distribution is not uniformly distributed, then randomizing said V-E pairs on said V-E plainplane, otherwise performing the following steps for sequentially arranging allocations of the V-E pairs according to the magnitude of each said node or said edge, thereby obtaining min-cut or/and ratio min-cut partitioning;

performing a first sorting step from an edge view based on a first side of said V-E plainplane;

performing a second sorting step from an node view based on a second side of said V-E plainplane;

performing a third sorting from said edge view based on a third side of said V-E plainplane;

performing a fourth sorting step from said node view based on a fourth side of said V-E plainplane;

initializing node set record;

performing a fifth sorting step from said node view based on the second side; performing a sixth sorting step from said edge view based on said first side/third side;

determining whether said node set is still interchanged or not? If, if said node set is no longer interchanged then go back to perform said fifth sorting step, otherwise, performing a seventh sorting step from said node view based on said fourth side;

determining whether said node set <u>is</u> still interchange or not? I, <u>if</u> said node set is still interchanged, then performing said fifth sorting step for achieving an optimal min-cut or ratio min-cut partitioning.

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18. (Currently Amended) A method for display data compression techniques by different light intensity and/or different patterns on a monochrome viewpoint, comprising:

displaying (V, E) pairs on an initial V-E plainplane shown on a monitor screen to observe the said initial (V, E) pairs distributed condition, wherein said V indicates nodes that represent components of said circuit and wherein said E indicates edges that represents the nets of said circuits;

setting L nodes x W edges (V, E) pairs rectangle region to compose a block, wherein said L and W are integers;

defining the more (V, E) pairs in said block to be displayed by the relatively high light intensity to the less (V, E) pairs in said block; and

watching relatively large size of V-E plainplane or a whole V-E plainplane to said initial (V, E) plainplane on said monitor screen, wherein said exact (V, E) pairs positions still be held, thereby zooming in said V-E plainplane to watch detail local (V, E) pairs distributed condition, or zooming out to watch global (V, E) pairs distributed condition on said monitor screen.

19. (Currently Amended) A method for display data compression techniques by different light intensity and/or different patterns on a monochrome viewpoint, comprising:

displaying (V, E) pairs on an initial V-E plainplane shown on a monitor screen to observe the said initial (V, E) pairs distributed condition, wherein said V indicates nodes that represent components of said circuit and wherein said E indicates edges that represents the nets of said circuits;

setting L nodes x W edges (V, E) pairs rectangle region to compose a block, wherein said L and W are integers;

defining the less (V, E) pairs in said block to be displayed by the relatively high light intensity to the more (V E) pairs in said block; and

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watching relatively large size of V-E plainplane or a whole V-E plainplane to said initial (V, E) plainplane on said monitor screen, wherein said exact (V, E) pairs positions still be held, thereby zooming in said V-E plainplane to watch detail local (V, E) pairs distributed condition, or zooming out to watch global (V, E) pairs distributed condition on said monitor screen.

20. (Currently Amended) A method for display data compression techniques by different color and/or different patterns on a monochrome viewpoint, comprising:

displaying (V, E) pairs on an initial V-E <u>plainplane</u> shown on a monitor screen to observe the said initial (V, E) pairs distributed condition, wherein said V indicates nodes that represent components of said circuit and wherein said E indicates edges that represents the nets of said circuits;

setting L nodes x W edges (V, E) pairs rectangle region to compose a block, wherein said L and W are integers;

defining the more (V, E) pairs in said block to be displayed by the relatively bright color to the less (V, E) pairs in said block; and

watching relatively large size of V-E plainplane or a whole V-E plainplane to said initial (V, E) plainplane on said monitor screen., wherein said exact (V, E) pairs positions still be held, thereby zooming in said V-E plainplane to watch detail local (V, E) pairs distributed condition, or zooming out to watch global (V, E) pairs distributed condition on said monitor screen.

21. (Currently Amended) A method for display data compression techniques by different color and/or different patterns on a monochrome viewpoint, comprising:

displaying (V E) pairs on an initial V-E <u>plainplane</u> shown on a monitor screen to observe the said initial (V, E) pairs distributed condition, wherein said V indicates nodes

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that represent components of said circuit and wherein said E indicates edges that represents the nets of said circuits;

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setting L nodes x W edges (V, E) pairs rectangle region to compose a block, wherein said L and W are integers;

defining the more (V, E) pairs in said block to be displayed by the relatively bright color to the less (V, E) pairs in said block; and

watching relatively large size of V-E plainplane or a whole V-E plainplane to said initial (V, E) plainplane on said monitor screen, wherein said exact (V, E) pairs positions still be held, thereby zooming in said V-E plainplane to watch detail local (V, E) pairs distributed condition, or zooming out to watch global (V, E) pairs distributed condition on said monitor screen.